REMARKS/ARGUMENTS

Claims 1-32 are pending, and claims 5-7 are allowed. Claims 1, 2, 14, 20, 25, and 28-31 are amended. In view of the following, all of the claims are in condition for allowance. **But if after considering this response the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner schedule a telephone interview with the Applicant's attorney to further the prosecution of the application.**

The Applicant's attorney thanks the Examiner for speaking with him on November 12, 2008 and December 05, 2008 to further the prosecution of the application, and has amended the claims along the lines that he and the Examiner discussed.

Rejection of claims 1-4, 8-13, 25-28 and 32 under §102(b) as being anticipated by Patapoutian et al. (US 5,661,760)

Claim 1

Claim 1 as amended recites a servo wedge having a portion that does not include a zero-frequency field and that is detectable during a spin up of a disk without a prior detection of a zero-frequency field.

For example, referring, *e.g.*, to FIGS. 4 and 6 and paragraphs 22, 31, 34-52 and 54 of the present application, in an embodiment a servo wedge 22 includes a preamble 74 that does not include a zero-frequency field. During spin up of the disk, a servo circuit 30 exploits the properties of a sinusoid to detect the preamble 74 without the need to first detect a zero-frequency field. Once the preamble 74 is detected, then a disk-drive controller may read the sector and track IDs 80 and 82 to determine an initial position of a read-write head over the disk. As a result, the disk's data-storage capacity can be increased by reducing the number of, or altogether eliminating, zero-frequency fields in servo wedges.

Patapoutian, on the other hand, does not disclose a servo wedge having a portion that does not include a zero-frequency field and that is detectable during a spin

up of a disk without a prior detection of a zero-frequency field. Patapoutian discloses servo wedges 68 each having an optional DC erase field 731 (FIG. 4; col. 6, lines 47-53). The DC erase field 731 is considered optional because not every servo wedge 68 must have a DC erase field. But it was well known at the time that the present application was filed that at least one or more of the servo wedges 68 must have a DC erase field 731 for a disk-drive controller to detect during disk spin up so that the disk-drive controller can determine an initial postion of a read-write head. A similar prior-art disk utilizing both servo wedges and spin-up servo wedges is disclosed in FIGS. 2-3 of the present patent application.

Claim 2

Claim 2 is patentable by virtue of its dependency from claim 1.

Claim 3

Claim 3 recites a storage disk comprising servo wedges and no zero-frequency spin-up fields associated with the servo wedges.

In contrast, as discussed above in conjunction with claim 1, at least some of Patapoutian's servo wedges 68 must include a DC erase field 731.

Claim 4

Claim 4 is patentable by virtue of its dependency from claim 3.

Claim 8

Claim 8 recites a storage disk comprising no zero-frequency spin-up fields.

In contrast, as discussed above in conjunction with claim 1, Patapoutian's disk must include at least some DC erase fields 731.

Claims 9-13

These claims are patentable by virtue of their dependencies from claim 8.

Claim 25

Claim 25 as amended recites writing onto a surface of a data-storage disk a servo wedge that includes servo data that is detectable during a spin up of the disk, and writing onto the surface of the disk no zero-frequency spin-up field that is associated with the servo wedge.

In contrast, as discussed above in conjunction with claim 1, Patapoutian's servo wedges 68 that do not include a DC erase field 731 are not detectable during spin-up of the disk.

Claims 26-28

These claims are patentable by virtue of their dependencies from claim 25.

Claim 32

Claim 32 is patentable for reasons similar to those recited above in support of the patentability of claim 8.

Rejections of claims 14-24 and 29 under §103(a) as being unpatentable over Tuttle et al. (US 6,108,151) in view of Patapoutian

Claim 14

Claim 14 as amended recites a processor operable to detect a servo wedge without a zero-frequency field during spin up of a disk.

In contrast, not only does Tuttle fail to disclose or suggest a processor operable to detect a servo wedge without a zero-frequency field during spin up of a disk, he teaches away from this. Tuttle states that a special sequence of bits ("normally comprised of a long sequence of '0' bits," *i.e.,* a zero-frequency or DC-erase field) is recorded in at least one of the servo wedges, and that this special sequence of bits must first be detected during disk spin up before the read channel can locate and acquire the remaining servo wedges (col. 15, lines 19-30). Therefore, Tuttle teaches that a processor cannot detect a servo wedge during disk spin up unless the servo wedge includes a zero-frequency field.

Furthermore, as discussed above in conjunction with claim 1, Patapoutian does not disclose or suggest the teaching/suggestion missing from Tuttle, namely a processor operable to detect a servo wedge without a zero-frequency field during spin up of a disk.

Claims 15-19

These claims are patentable by virtue of their dependencies on claim 14.

Claim 20

Claim 20, as amended, is patentable for reasons similar to those recited above in support of the patentability of claim 14.

Claims 21-24

These claims are patentable by virtue of their respective dependencies from claim 20.

Claim 29

Claim 29 as amended recites writing onto a surface of a data-storage disk a servo wedge without a zero-frequency spin-up field, the servo wedge including servo data that is detectable during a spin up of the disk.

In contrast, not only does Tuttle fail to disclose or suggest a servo wedge that lacks a zero-frequency spin-up field but that includes servo data that is detectable during spin up of a disk, he teaches away from this. As discussed above in conjunction with claim 14, Tuttle states that servo data cannot be detected during disk spin up unless the servo wedge that contains the servo data includes a zero-frequency spin-up field.

Furthermore, as discussed above in conjunction with claim 1, Patapoutian does not disclose or suggest the teaching/suggestion missing from Tuttle, namely a servo wedge that lacks a zero-frequency spin-up field but that includes servo data that is detectable during spin up of a disk.

Allowable Subject Matter

Claims 5-7 are allowed.

The Applicant's attorney has amended objected-to claims 30-31 into independent form.

CONCLUSION

In light of the foregoing, claims 1-32 are in condition for allowance, which is respectfully requested.

In the event any fees are due as a result of this amendment, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner schedule a phone interview with the Applicant's attorney, Bryan Santarelli at (425) 455-5575.

DATED this 09th day of December, 2008.

Respectfully submitted,

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